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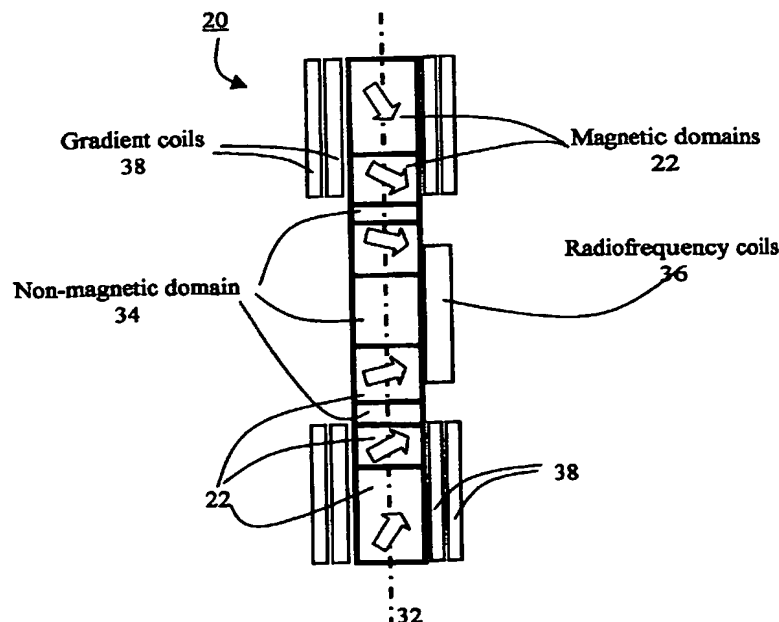
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[Continued on next page]

(54) Title: METHOD AND APPARATUS FOR MAGNETIC RESONANCE ANALYSIS



(57) Abstract: A method of designing a magnetic structure (20) for providing a monotonic static magnetic field for magnetic resonance analysis. The method comprises: selecting a first geometry (12) defining a volume-of-interest and selecting a magnetic field query (14), which is defined on a plurality of coordinates within the first geometry, the magnetic field query being monotonic. The method further comprises selecting a second geometry (16) defining the magnetic structure and calculating a remanence distribution (18) within the second geometry, by using the first geometry, the second geometry and the magnetic field query.



SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

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PCT/ IL03/00845

## A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : A61B 5/055; G01V 3/00

US CL : 600/410; 324/307

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 600/410, 423, 424; 324/307, 309, 318, 320, 321

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
EAST: magnetic resonance, NMR, magnetization vector, remanence

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X --- Y	US 6,147,578 A (PANFIL et al.) 14 November 2000 (14.11.2000), See figures 1-23, col. 13 lines 44-49, col. 39 lines 26-40.	1-14, 23-45, 48-50, 59-71, 73-85, 91-93, 98-107, 110-112, 121-147 ----- 94, 95 and 148-199
Y	US 6,226,543 B1 (GILBOA et al.) 01 May 2001 (01.05.2001), See col. 9 lines 50-64.	94, 95 and 148-199

☐ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

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"Y"

document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

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